inflammation is almost invariable. That the resulting papillitis may be and remain slight, or may become intense and present the appearances of mechanical congestion. The causes of this difference we do not know. That such mechanical congestion does not, as a rule, result from the compression of the vessels in or just behind the sclerotic ring, but always, when intense, from compression by inflammatory products in the substance of the papilla. It must not be forgotten that an increase in the size of vessels may be of reflex vasomotor origin, as in all inflamed parts. "That while slow increase of intra-cranial pressure has no effect on the retinal vessels, a sudden increase hinders the escape of blood from the eye for a time, and may intensify a papillitis originating in another way. That distention of the sheath of the nerve alone is probably insufficient to cause papillitis by its mechanical effect, but may, perhaps, intensify the process otherwise set up, especially if the fluid possesses an irritative quality, and if (as Schmidt-Rimpler asserts and Leber denies) it can find its way into the lymphatic spaces of the optic disk."

It is interesting to observe that Dr. Gowers lends the weight of his authority to the use of the term "papillitis," which word, in the opinion of one rather well-known English ophthalmic surgeon, is employed only "by exceptionally bad writers." If Dr. Gowers is an example of the "exceptionally bad writers" who have used this phraseology we wish to cast our fortunes with them.

As year by year improved knowledge and discriminating observation have placed the intelligent use of the ophthalmoscope as an aid in the elucidation of the diagnosis of constitutional diseases upon a higher plane, and the false readings of inexperienced enthusiasts have been subjected to careful revision, in which work the medical world is indebted to no one more than to Dr. Gowers, the subject of ophthalmoscopy has acquired great importance. To anyone who wishes to learn where this science stands, and exactly what relation it bears to medical knowledge as a whole, we recommend this work as by far the best that has appeared in any language. G. E. de S.

CONTRIBUTION A L'ÉTUDE DES PSOROSPERMOSES CUTANÉES ET DE CERTAINES FORMES DE CANCER-MALADIE DE LA PEAU DITE MALADIE DE PAGET. Par le Dr. Louis Wickham, Ancien Interne en Médecine et en Chirurgie des Hôpitaux de Paris, etc. Pp. 184, avec 4 planches hors texte. Paris: G. Masson, 1890.

A CONTRIBUTION TO THE STUDY OF PSOROSPERMOSIS AND PAGET'S DISEASE. By Dr. Louis Wickham.

This admirable monograph is a timely contribution to a theme but recently presented for discussion and as yet but little investigated. The disease first described by Paget in 1874 and still associated with his name (eczema of the nipple and areola, and cancer of the breast, malignant papillary dermatitis of Thin) is one whose history and symptoms are to-day well recognized. Somewhat more than one year ago, however, Darier, of Paris, in a remarkable paper, called the attention of the French Biological Society to the fact that he had recognized, in what is known among his colleagues as acne cornée (acne sébacée concrète), and also in a cutaneous affection described by him as "vegetative follicular psorospermia," and lastly in Paget's disease of the nipple, a novel parasite. This he recognized as the ovoid unicellular psorosperm, minutely described by Leuckart, and arranged according to Balbini in five separate families under the class of sporozoæ, one family being limited in its habitat to fishes, the others, in different measure, finding their host in different members of the animal kingdom. These animal cysts, well illustrated in the plates added to the treatise before us, were accurately illustrated in Darier's previous contributions to this subject. Special attention was early attracted to the theme in this country, in consequence of the odd circumstance that Prof. J. C. White, of Boston, was present in Paris when Darier's patient was shown, affected with the "vegetative follicular psorospermosis," and the American dermatologist at once recognized the disease as identical with that described by him earlier in the same year as a form of follicular keratosis. At a subsequent date, but yet soon after his return home, the same gentleman had the singular opportunity of reporting the case of another patient with the same disease, in which a careful structural examination was made with a view particularly to the recognition of the parasites figured by the French author. The result was qualified.

The bodies claimed by the French authors cited, also by Mr. J. Hutchinson, Jr., of London, as the effective agents in the production of the diseases named, are recognized without great difficulty. Their morphological characters are distinct. They are ovoid or circular "corpuscles," very clearly defined, having a lucent and somewhat thickened enveloping membrane, wholly unprovided with fibrillæ of attachment to the peripheral elements. In volume they are two and even three times larger than the cells of the epithelium in which they are found lodged, and between which (never within which) they lie. They have a flattened "nucleus" usually pushed to one side of the enclosed mass of protoplasm, and, after the addition of alcohol, exhibit a decided retraction of this protoplasm with the consequent formation of vacuoles between the latter and the enveloping capsule. In the maturer condition the enclosed mass is found to contain numerous granules, which being released on rupture of the capsular wall, escape and are supposed to reproduce the psorosperms after introduction through an abraded stratum corneum into previously healthy tissue. The cysts are so large as to measure at times one-half or one-third of the entire thickness of the rete mucosum in which they are seen.

Cutaneous psorospermosis is thus thought to be a special pathological condition, solely due to the invasion of the integument by the animal parasites described, and existing not merely in Paget's disease of the nipple and breast, and the similar epitheliomatous lesions which have been recognized in the scrotum, but also in certain forms of acne, molluscum sebaceum ("contagiosum," of Bateman), vegetating follicular psorospermia, in White's follicular keratosis, and also probably in other diseases and more particularly in other forms of cancer.

Upon this advanced position, it is proper to state that the scientific world looks to-day with simply respectful consideration. The conscientious work done by the investigators named is worthy of all praise and of future study. But it is yet to be distinctly settled that an epithelial cell may not under special conditions undergo peculiar metamorphoses with resulting forms which are either identical with or exceedingly difficult to separate from these cyst-like bodies. The failure to reproduce these several diseases by artificial inoculation of the alleged parasites, and the unsatisfactory reports of the results of their culture and of the discovery of a special staining medium have led to a qualified acceptance only of the conclusions here presented.

The genial author of this little monograph may, however, be well congratulated on the fruit of his work. He has not merely given a most creditable report of the whole subject from the special etiological point of view which he and his friends accept, but has furnished us with the best accessible abstract of the literature of Paget's disease of the nipple which has been brought up to date. The plates added, illustrating the gross and microscopical features of the malady, are well reproduced.

His many friends in England and America will be glad to welcome this modest and painstaking contribution to science as the first-fruits of a labor which gives promise of large results. J. N. H.

EPILEPSY: ITS PATHOLOGY AND TREATMENT. An Essay to which was awarded a prize of four thousand francs by the Académie Royale de Médecine de Belgique, December 31, 1889. By HOBART AMORY HARE, M.D. (Univ. Penna.), B.Sc., Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania; Physician to St. Agnes Hospital and to the Children's Dispensary of the Children's Hospital; Laureate of the Royal Academy of Medicine in Belgium, of the Medical Society of London; Member of the Association of American Physicians. Pp. 228. Philadelphia and London: F. A. Davis, 1890.

THIS entertaining essay is, we believe, one of nine by this bright and energetic young writer which have received substantial recognition within a short period. Dr. Hare is decidedly to be congratulated on his ability as a prize-taker. That he is an indefatigable worker goes without saying, and he is winning not only monetary prizes, but an enviable name in his special field of work.

The subject is treated systematically in its various aspects—historical, symptomatic, etiological, pathological, and therapeutical. Dr. Hare takes issue with the belief of Gowers that transient post-convulsive paralysis may in certain cases be due to inhibition of the motor centres. Indeed, he is inclined to deal rather severely with this eminent neurologist for maintaining a view which he regards as altogether unnecessary, and entirely without physiological or other foundation. Yet we think that he is wrong; for the transient palsy succeeding a very slight fit, and that following seizures in which a purely sensory discharge replaces motor spasm, are better explained by Gowers's theory, of inhibition, than by that of Todd and Robertson's, of exhaustion. There at least seems nothing unreasonable in the view advanced by Gowers to account for the paresis succeeding a seizure of the latter sort; indeed, it cannot well